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- b) separating the biomolecule-ligand complexes from the unbound members of the mass-coded combinatorial library;
 - c) contacting the biomolecule-ligand complexes with the second ligand to dissociate biomolecule-ligand complexes in which the ligand binds to the biomolecule at [the] a binding site of the second ligand, thereby forming biomolecule-second ligand complexes and dissociated ligands;
 - (d) separating the dissociated ligands and biomolecule-second ligand complexes; and
 - (e) determining the molecular mass of each dissociated first ligand,

wherein the molecular mass of each dissociated first ligand corresponds to a set of peripheral moieties present in that ligand, thereby identifying a member of the mass-coded combinatorial library which is a first ligand for the biomolecule and binds to the biomolecule at [the] a binding site of the known second ligand for the biomolecule.

REMARKS

Upon entry of the foregoing amendment, claims 16-22 and 51-72 will remain pending in the application. Claims 16, 52, 54-57, 59-60, 62-64, and 68 have been amended to correct errors introduced by way of Applicants' amendments filed on May 12, 2000 and July 19, 2000, and to improve the clarity of the claims. No new matter is introduced by way of this amendment.

In the Office communication mailed on August 29, 2000, an election of species is required. In particular, Applicants are required to elect a single compound structure for each element of the claimed invention. Applicants respectfully traverse this requirement. Applicants do not consider the patentability of their invention to reside in the chemical structure of either the library compounds or the biomolecules that are assayed by the claimed methods. Indeed, it is an essential feature of the invention that the mass-coded combinatorial libraries employed in the claimed methods each

comprise a large number of molecules of diverse chemical structure. Therefore, it simply is not possible to elect a single compound species for examination.

However, in order to facilitate search of the invention, Applicants hereby elect the species wherein:

1. The peripheral moieties Y are attached to the scaffold X by way of amide linkages, the reactive groups on the scaffold precursor being acid chlorides and the peripheral moiety precursors being amine compounds;
2. The first biomolecule is a protein; and
3. The second biomolecule is a protein.



Claims 16-22 and 51-72 read on the elected species. Applicants understand that examination will be conducted according to the procedure set forth in M.P.E.P. § 809.02.

Should the Examiner believe that further communication regarding this matter would be helpful, she is invited to contact the undersigned at the telephone number provided below.

Applicants enclose a Petition for Two-Month Extension of Time, up to and including November 29, 2000, to respond to the Office Action mailed on August 29, 2000.

No other fees are believed to be due in connection with this response. However, please charge any payments due or credit any overpayments to our Deposit Account No. 08-0219.

Respectfully submitted,

A handwritten signature in cursive script that reads "Janice M. Klunder". The signature is written in dark ink and is positioned above a horizontal line.

Janice M. Klunder, Ph.D.
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November 2, 2000

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